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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,509	04/19/2004	Mark V. Holzmann	4191-00347	3482
26753	7590	11/09/2006	EXAMINER	
ANDRUS, SCEALES, STARKE & SAWALL, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202			BUSHEY, CHARLES S	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/827,509	<b>Applicant(s)</b> HOLZMANN ET AL.	
	<b>Examiner</b> Scott Bushey	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8 and 48-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8 and 48-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The language added to claim 48, specifically, “a non-rectilinear outer surface profile”, does not find antecedent basis with the text of the specification.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pomplun et al (Figs. 2-4; col. 3, lines 17-30, 64-67; col. 4, lines 1-11).

Applicant should note that as clearly stated by the columns and lines of the patent as cited herein and previously, Pomplun et al clearly discloses applicant's invention as recited by instant claim 8. Specifically, the filter frame (20) is integrally injection molded with a seal (24) from a thermoplastic, such as PP, PE, or other polyolefins.

4. Claims 48 and 51 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lanier, Jr. et al (Figs. 1, 2, and 8).

Applicant should note that Lanier, Jr. et al teach a filter element having media (36), a support frame (28) supporting the media, and a seal (54,60) integrally formed with the frame. It is noted that the frame (28) includes a first longitudinally facing surface (at the end of the lead line from numeral 28, facing the bottom of the page), a third longitudinally facing surface (opposite the first surface and facing the top of the page), and a second laterally facing surface (between the first and third surfaces and facing the left side of the page), each of the first, second, and third surfaces being enclosed by the integrally formed seal (54,60), the seal including tapered ramp surfaces extending generally parallel with the first and second surfaces of the frame and converging slightly toward one another in the direction of the left side of the page, as well as curved surfaces connecting the tapered surfaces, thus providing a seal with a non-rectilinear outer surface profile.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pomplun et al taken together with Fath et al.

Pomplun et al (Figs. 2-4; col. 3, lines 17-30, 64-67; col. 4, lines 1-11) as applied above substantially disclose applicant's invention as recited by instant claim 49, except for the support frame and seal being formed from different materials.

Fath et al (Figs. 1a, 1b, and 3; col. 2, lines 22-25, 35-37, 52-59; col. 3, lines 1-6) disclose a filter element with an integrally formed support frame (7) and seal member (9), the reference teaching that the frame and seal may be formed either from the same materials (Fig. 1a), or alternatively from different materials (Fig. 1b), the alternative embodiments providing equivalent obvious variants of the frame/seal assembly. In view of the teaching by Fath et al, that the support frame and seal may be either of the same or different thermoplastic materials, it would have been obvious for an artisan at the time of the invention, to modify the frame/seal assembly as taught by Pomplun et al, to have the seal constructed from a different material from the support frame, since such would allow for customization of the frame/seal assembly dependent upon the required physical characteristics of the support frame element and the seal element of the frame/seal combination.

8. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claim 49 above, and further in view of Gaither et al.

The reference combination as applied to claim 49 above substantially discloses applicant's invention as recited by instant claim 50, except for the material of the seal being softer than the material of the support frame. It is noted that the reference combination as applied to claim 49 above suggests using different materials for the support frame and seal members. It should also be noted that a seal element is typically more pliable or malleable, as is the case in the primary reference of the reference combination as applied to claim 49 above, than the support frame element, since the support frame serves to somewhat rigidly support the filter media, while the seal serves to seal the element within a housing that may be imperfectly shaped.

Gaither et al (Figs. 3 and 4; col. 2, line 54 through col. 3, line 13) disclose a support frame/seal assembly wherein the seal portion (42) is softer than the material of the support frame (40). Wherein the primary reference combination suggests forming a frame/seal assembly from different materials, and also suggests that the seal should be more pliable than the frame, it would have been obvious for an artisan at the time of the invention, to provide a frame/seal assembly with a seal portion that is softer than the frame portion, in view of Gaither et al, since such would provide sufficient support for the filter media via the harder frame support portion, and provide a reliable seal by providing a seal portion that is softer and pliable enough to seal against an imperfectly shape filter housing.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 48-51 have been considered but are moot in view of the new ground(s) of rejection.

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10. Applicant's arguments filed September 25, 2006, with respect to instant claim 8, have been fully considered but they are not persuasive. Applicant's arguments relative to claim 8 have been specifically addressed in the rejection statement above.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Bushey  
Primary Examiner  
Art Unit 1724

csb  
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